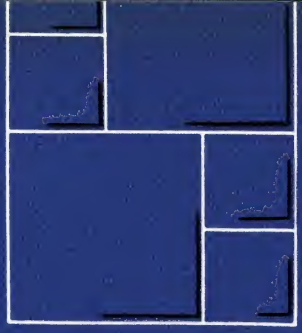
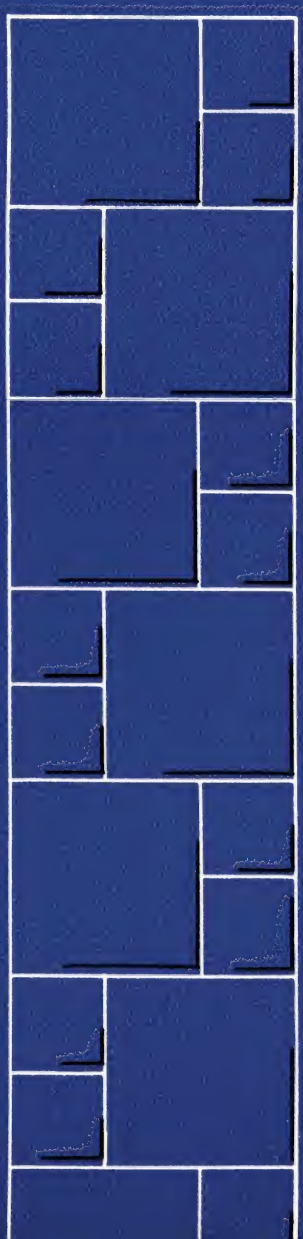


VEOS

(Trade-Mark Reg., U. S. Pat. Off.)

VITREOUS ENAMEL ON STEEL



Steel Wall Tile

IN ALL COLORS

NEVER FADING COLORS of VEOS STEEL TILE

BLACK •

WHITE •

AQUA •

BISQUE •

IVORY •

JADE GREEN •

GREEN •

ORCHID •

PASTEL SHADES OF UNUSUAL BEAUTY

VEOS Steel Bodied Tile is supplied in a variety of pleasing pastel shades selected by a well known color expert—including black, white, green, jade green, bisque, ivory, aqua and orchid. These soft, delicate tones blend perfectly with any color scheme. Regardless of how delicate the tint may be, a special process of fusing guarantees it to be fadeless, and any room furnished in VEOS today will be just as fresh and colorful 25 years from now.

NEVER CRACKS OR CRAZES

VEOS is as sturdy as the structural steel in Manhattan's skyscrapers. It neither cracks, crazes nor checks. This is due to the fact that vitreous (porcelain) enamel has the same coefficient of expansion and contraction as its steel body.

The special foundation sheet, which provides a full half inch of thermal insulation behind the tile *maintains the tiles themselves at room temperature.* This eliminates the objectionable features of condensation on the wall.

8 BASIC POPULAR COLORS

The eight basic colors, illustrated at right, were chosen for their ability to blend together and with other colors, thus giving a variety of color schemes, strikingly set off by black, white or other colored borders. Many uniquely beautiful effects may be achieved through their skillful handling and arrangement coupled with the application of various sizes of tile . . . from the small 1½ inch dots to the large 6x12 inch sizes. These eight basic colors, plus a selection of new decorative designs (illustrated on page 7), offer unlimited opportunities for working out bathrooms and kitchens of loveliness and practical utility.

ALL OTHER COLORS ARE AVAILABLE

Where architects and decorators require special blending of color for a decorative scheme, and the order is large enough for a special color run, we can supply any variety of shades designated. The Veos Art Department will cooperate in the preparation of sketches suggesting arrangements for unusual wall shapes and designs for any requirement.

Development of VEOS STEEL TILE

The Architect, Builder and Home Owner have only one thing in mind when tiling is specified . . . *the beautiful, smooth and easy to keep clean surface inherent in tile* . . . This surface is specially prepared glass *fused* on the base (clay or steel) at temperatures which virtually *grips* the surface to the base material, thereby insuring permanent beauty and utility.

The only function any tile body performs is *to support the surface and contribute to its permanence.* Therefore, the only fundamental difference between conventional clay tile and VEOS Steel Tile is that VEOS offers a vitreous (porcelain) surface on strong, rust-resisting *steel* while conventional clay tile provides a comparable surface on more brittle, easy to break *clay.*

VEOS Steel Bodied Wall Tile is not new. More than 2,000,000 square feet have been installed during the past eight years for practically every conceivable use . . . Magnificent metropolitan hotels, small country inns, luxurious residences, famous hospitals, ocean going liners, trans-continental trains, gasoline filling station rest rooms and countless other applications now as good as new after many years of rugged service offer convincing evidence of the superiority of VEOS Steel Bodied Tile.

During the past eight years of constant research and development, backed by the resources of one of the nation's largest independent steel companies, VEOS Steel Bodied Tile now brings to the building industry what is conceded to be the *first really basic improvement in the method of tiling for 2000 years.*

Among the outstanding advantages which Architects and Builders will be quick to see and capitalize are . . . tremendous savings in weight (only three and one half pounds per square foot installed, against conventional clay tile of about 16 to 18 lbs.); quick, fool-proof installation on a self-locating foundation sheet which provides structural strength PLUS thermal insulation and sound deadening features never before available in tiling; a variety of pleasing colors to meet modern demands—and A MATERIAL THAT NEEDS ONLY THE EXPERIENCE OF A CARPENTER TO INSTALL.

The

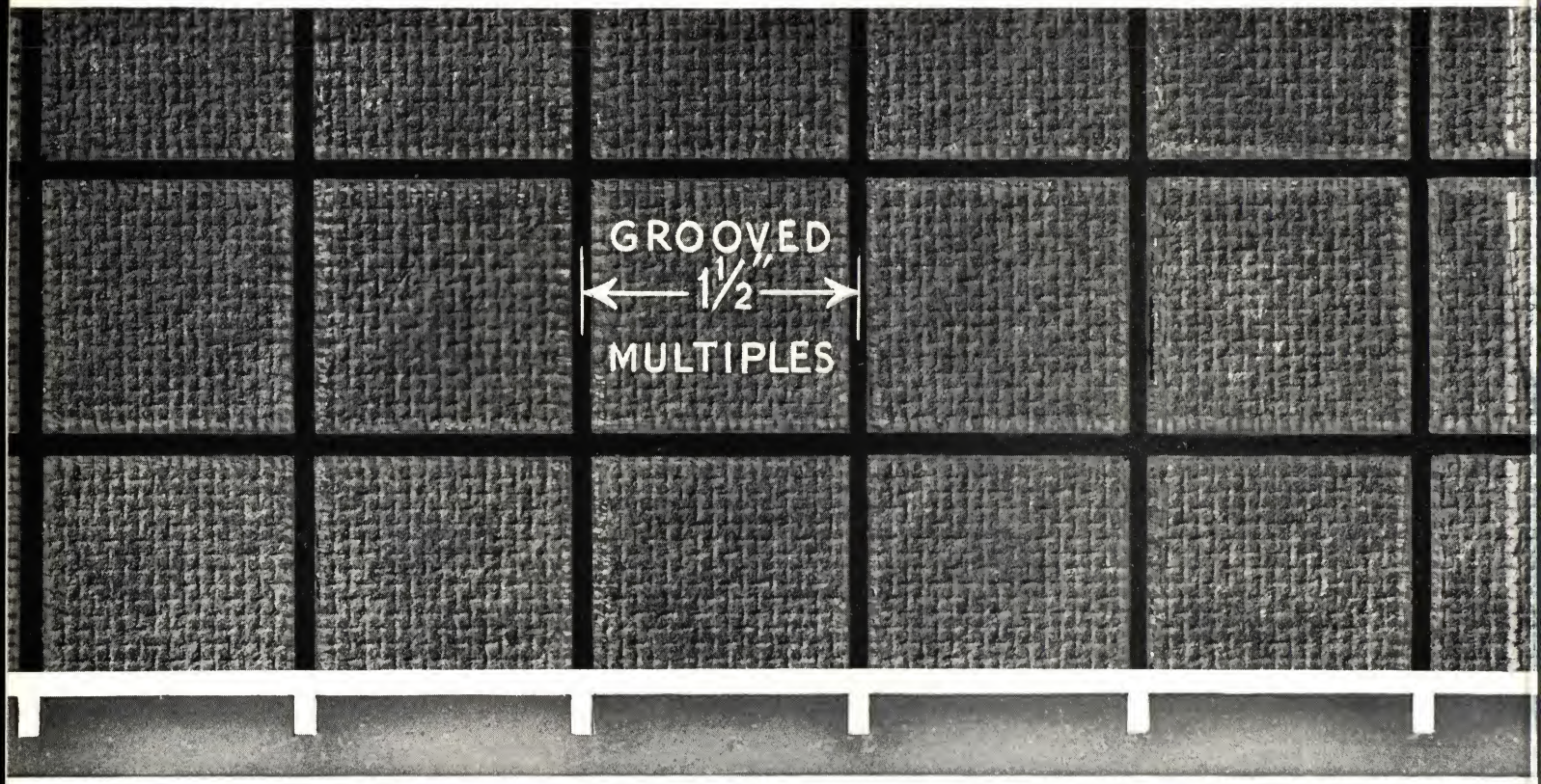
YOUNGSTOWN PRESSED STEEL DIVISION

MULLINS MANUFACTURING CORPORATION

WARREN • OHIO

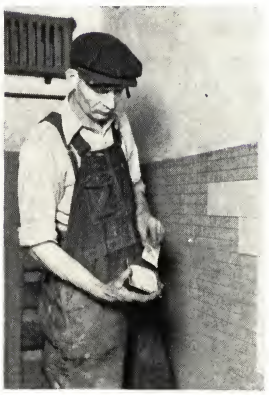
Distributors in all principal cities, see back cover

SIMPLICITY OF INSTALLATION



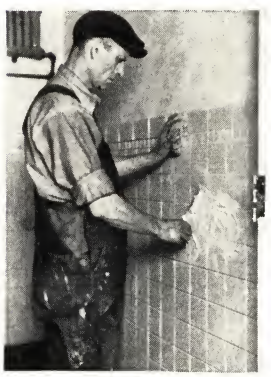
4 SIMPLE OPERATIONS performed by any carpenter

1. Fastening the foundation sheet to the wall.



2. Applying Veos Glue to the back of the tile.

3. Inserting the tile in self-locating foundation.



4. Grouting and pointing the joints.

THE SELF-LOCATING FOUNDATION SHEET

MATERIALS •

The VEOS Foundation Sheet is a light weight material made of long wood fibres prepared by a special process and compressed under tremendous pressure. Each tile is permanently secured to the foundation sheet, with Veos Glue, a gum base adhesive which clings to a glass surface. It is waterproofed and not affected by ordinary temperatures. Veos Grout is used to cement the tile in place. This is a white hydraulic cement to which is added a special water-proofed glue which also makes it adhere to the glazed surface of the tile. It can be colored to match tiling without losing any of its holding properties.

WATERPROOFED AND VERMIN-PROOFED •

The foundation sheet is waterproofed to withstand complete submersion without injury, if allowed to dry. It absorbs less moisture than any equivalent material available and is GUARANTEED NOT TO WARP, BUCKLE OR SHRINK. It has no nutritive value, and *it is also chemically treated so that vermin cannot eat it and live.*

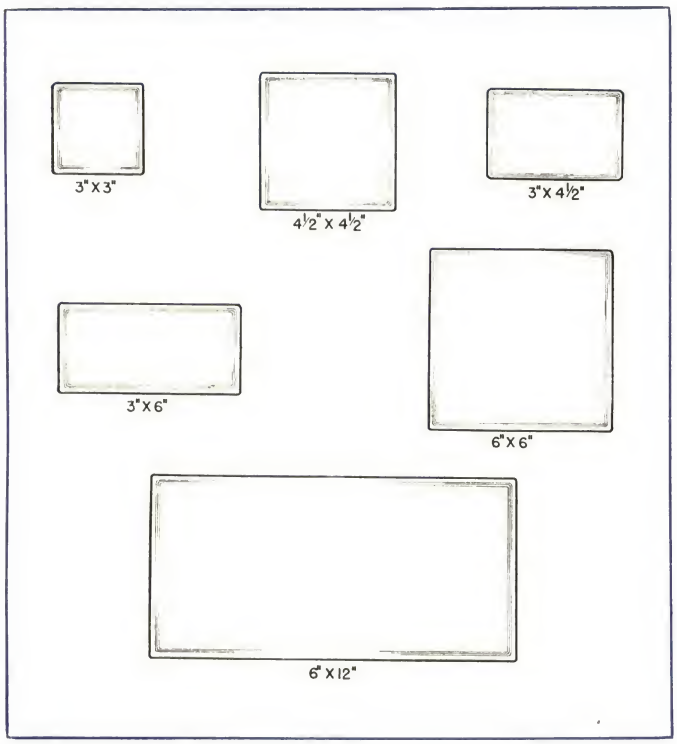
INSULATION •

The Veos Foundation Sheet offers a full ½ inch of thermal insulation, and also has a very definite sound-deadening effect which plays an important part in hospitals, bathrooms and other institutional installations.

PERMANENT •

A VEOS Steel Bodied Wall Tile installation will last as long as the wall to which it is applied.

6 STANDARD SIZES
With Inset Fixtures to Match . . . . .



Veos tiles are manufactured in 3x3, 3x6, 3x4½, 4½x4½, 6x6 and 6x12 inch sizes as illustrated at left. The Youngstown Pressed Steel Company also furnishes complete inset fixtures designed for use with VEOS Tiles and these have special means of fastening to the wall, thus simplifying the installation.

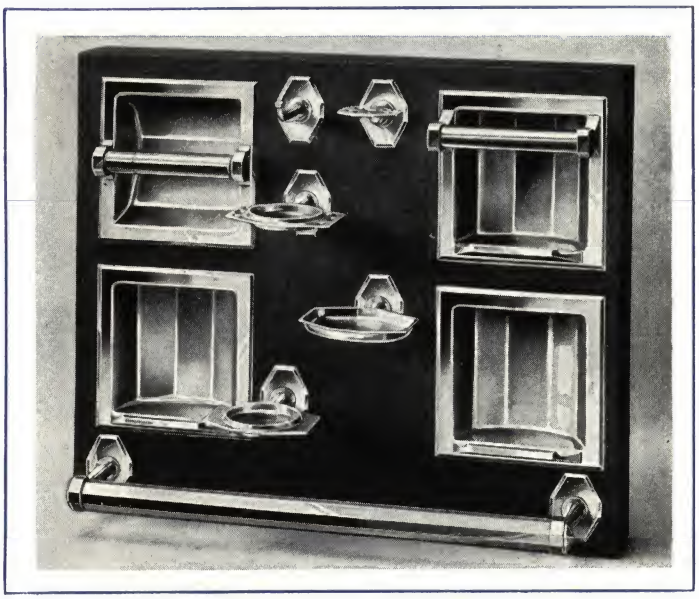
These fixtures are made to fit neatly and quickly into each installation of different sizes of tile. In addition we can supply the attractive group of chromium fittings illustrated below. They are especially made for use with VEOS and are appropriately modern. With colored fixtures to meet all demands for color, coupled with brilliantly designed chromium fixtures the Architect, Builder and Home Owner will find Veos Tile complete in every respect.

SPECIAL SHAPES

The special shapes shown on the following page are made for trim and finishing corners, top caps, bases, showers, etc. More than 36 shapes in all have been perfected to insure quick, attractive and permanent installations.

Veos tile is easily and speedily cut to any size, right on the job, with a special machine developed for the purpose. This machine is available for either AC or DC current, utilizes a small, special formula carborundum wheel which effects rapid, chipless cuts. The cut edges of the tile are covered with a special colorless, rust-proof edging which we supply—and the joint is then filled with grout. THE CUT EDGES WILL NOT RUST. Where cut tiles are exposed, such as around windows, door frames or pillars, we recommend our special colored edging lacquer which we supply, in colors to match Veos tile colors. These special edging lacquers will protect the edges permanently.

Holes can be quickly cut in the tile for pipes and electric wires and flanges are used around the pipes to conceal the cuts.



VEOS SPECIAL INSET FIXTURES

See Page 6 for Special Shapes or Trimmers

VEOS STEEL TILE

VEOS STEEL TILE . . . THE MODERN

A New Standard of Value

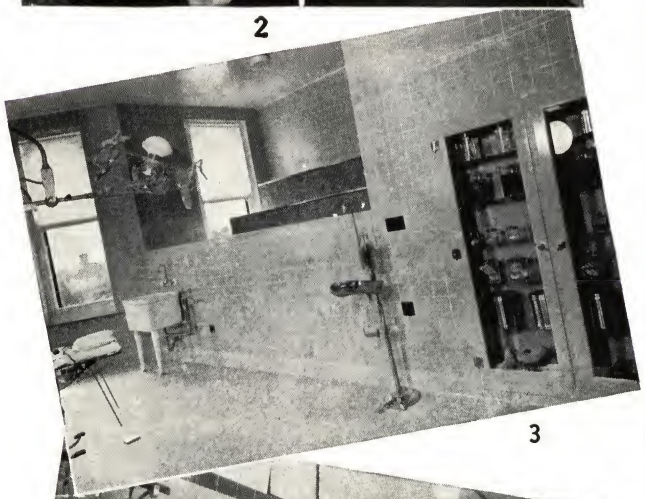
Future historians will record that we are now living in an age of steel. The red belching furnaces of a mammoth industry, the vast manufacturing plants that dot the land, the long gray ships that glide silently through the sea, the great straining giants that speed across the land, the long, graceful motored birds of the air—all are visible monuments to steel.

The ponderous, clay-bodied bathtubs of a generation ago have been superseded with porcelain (vitreous) enamel on steel; enamel-on-steel table tops have vanquished the wooden tops of old; the wooden ice box of yesterday has resigned in favor of the compact, easily cleaned porcelain enameled refrigerator of today; the cumbersome cook stove of our fathers has been obsoleted by the present enameled steel ranges; the beautiful enameled steel kitchen cabinet sinks and bath tubs of today are rapidly replacing their heavy-weighted contemporaries.

And now VEOS Enameled Steel Bodied Wall Tile, with its ingenious method of application, commends itself to the progressive buyer as the perfect wall covering. Installed quickly and conveniently by carpenters (who are available everywhere) VEOS will serve to improve living conditions in the small rural markets as well as in the great metropolitan centers by providing a permanent porcelain enameled surfaced wall tile that can be installed over existing walls by a carpenter mechanic . . . without mess, dirt or burdensome weight . . . and at a price strictly comparable with clay-bodied wall tiling.

1

2



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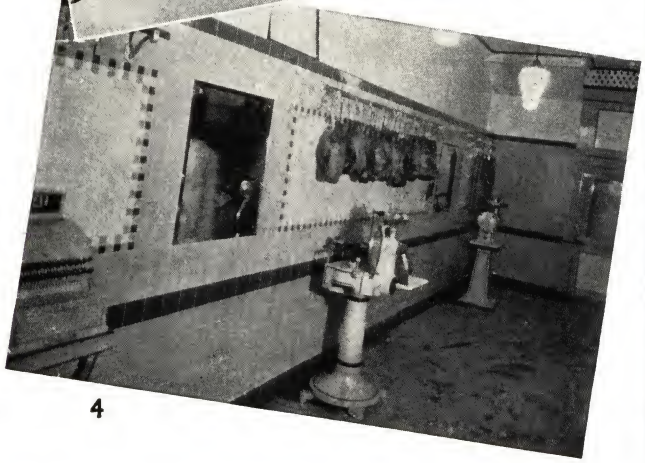


4

HOTEL

Before

WALL TREATMENT

Specified by Leading Architects

Veos Steel Bodied Wall Tile has proved its value to the satisfaction of architects and builders everywhere, the names of many of whom will be furnished on request. The practical creators of buildings and authorities on what shall go into them know full well the superiority of porcelain enamel on steel.

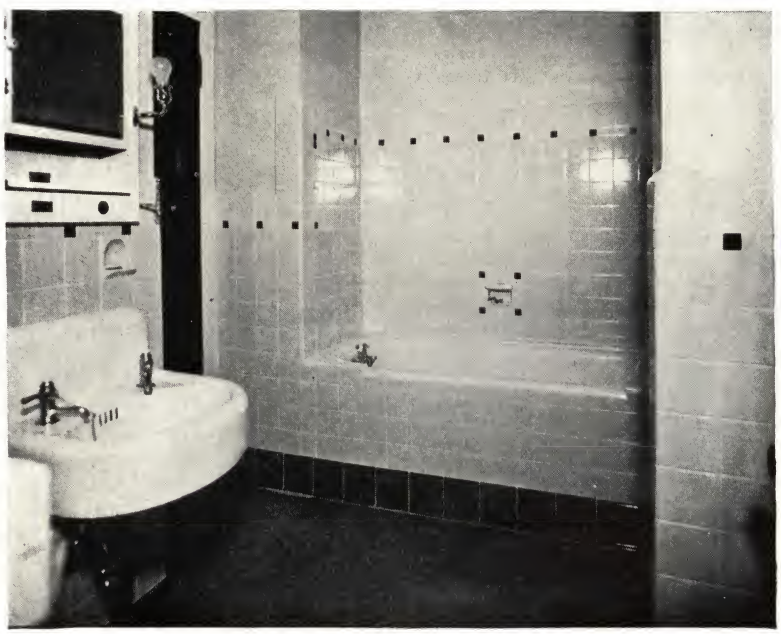
One of the major oil companies, knowing that neat, clean and attractive rest rooms always pay big dividends, ordered several thousand rooms to be tiled with VEOS . . . and one official remarked "Veos is the only material that we have ever purchased where there was not one dissenting voice". To the trained man no question of the practicability of Veos Tile arises. Experience has proved that extremes of temperatures, fumes and ordinary abuse will not injure porcelain enamel on steel and that the baked-on colors will ever remain true.

The illustrations on this page show various applications of Veos tiles in residential, institutional and industrial work. There is no better material available at any price and VEOS bids for the tile business strictly on the basis of outstanding merit and proved performance. We shall be glad to furnish samples and further details upon request.

1. Veos Tiles used in a Kitchen on Walls and Ceiling
2. A Gas Station Rest Room Before and After Veos Installation
3. An Operating Room using Veos Tile
4. A Modern Butcher Shop
5. A Vegetable Market
6. A Packing Plant
7. A Dentist Office
8. A Corridor
9. A Residential Bathroom
10. Another Modern Residential Bathroom

BATHROOM

After



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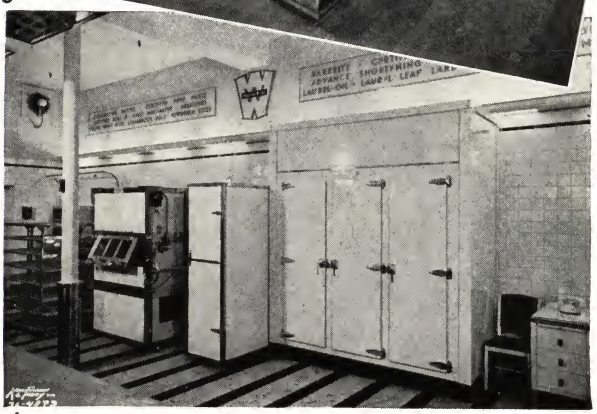

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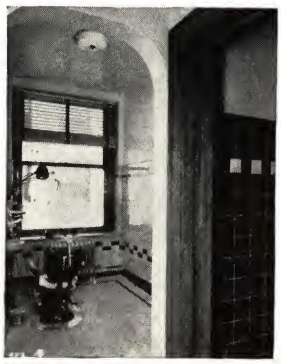

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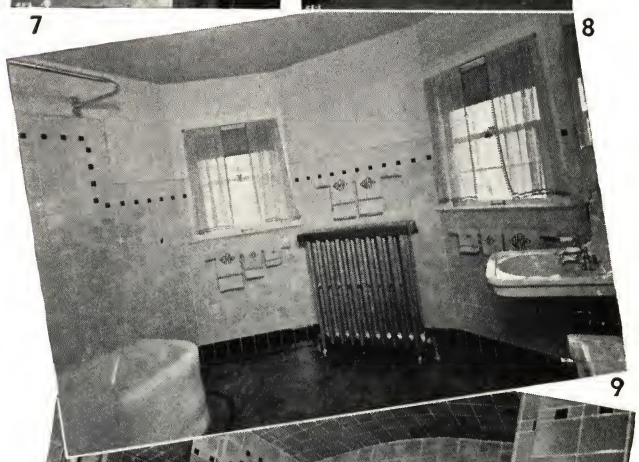
8



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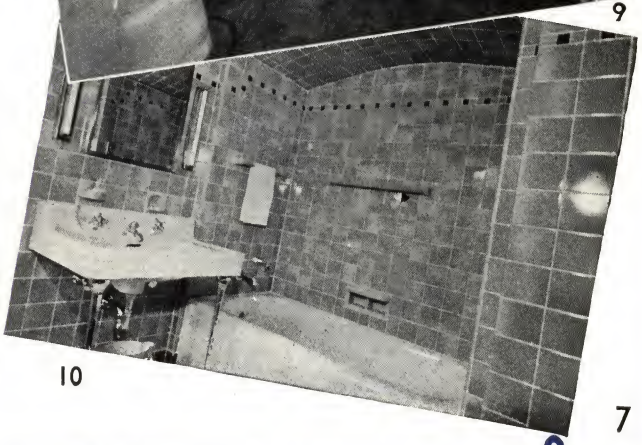


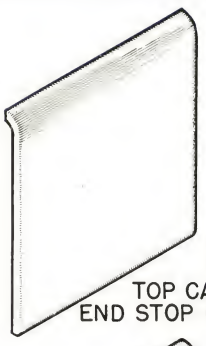
10

7

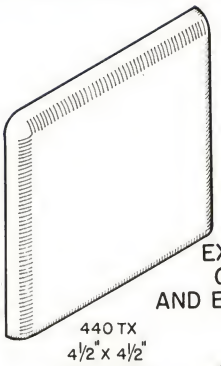
VEOS STEEL TILE

VEOS STEEL TILE
SPECIAL SHAPES OR TRIMMERS

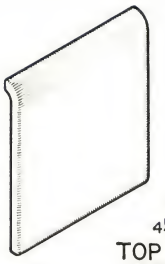
COLORS: Black, White, Aqua, Bisque, Ivory, Green, Jade Green, Orchid



652C
6"X6"
TOP CAP OR
END STOP CORNER



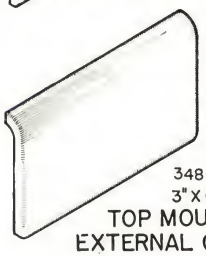
652TX
4½"X4½"
TOP
EXTERNAL
CORNER
AND END STOP



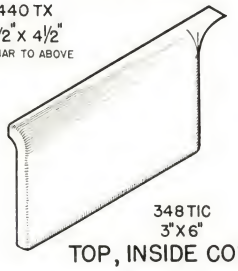
440T
4½"X4½"
TOP CAP OR
EXTERNAL
CORNER

440TMR
4½"X4½"
CAP
WITH RIGHT HAND MITRE
ALSO FURNISHED WITH LEFT HAND MITRE

328TX
3"X3"
TOP CAP
EXTERNAL CORNER
AND END STOP



348T
3"X6"
TOP MOULD OR
EXTERNAL CORNER

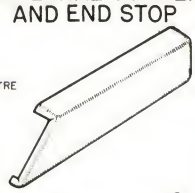


440TX
4½"X4½"
SIMILIAR TO ABOVE

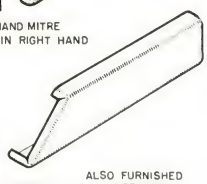
348TIC
3"X6"
TOP, INSIDE CORNER

348TMR
3"X6"
TOP MOULD
WITH RIGHT HAND MITRE

ALSO FURNISHED IN
LEFT HAND MITRE



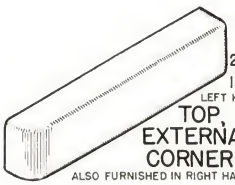
248TIML
1½"X6"
TOP CAP
OR TRIM
INTERNAL, LEFT HAND MITRE
ALSO FURNISHED IN RIGHT HAND



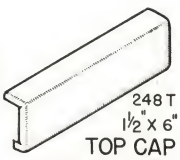
248TXMR
1½"X6"
TOP CAP
OR TRIM
EXTERNAL, RIGHT HAND MITRE

ALSO FURNISHED
IN LEFT HAND

248
1½"X6"
STRIP

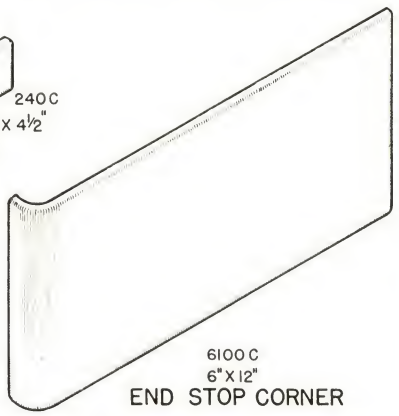


252TXL
1½"X6"
LEFT HAND
TOP,
EXTERNAL
CORNER
ALSO FURNISHED IN RIGHT HAND

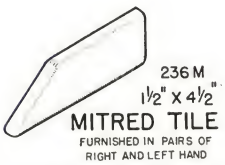


248T
1½"X6"
TOP CAP
OR MOULDING

240C
1½"X4½"
LINER
STRIP
CORNER



6100C
6"X12"
END STOP CORNER



236M
1½"X4½"
MITRED TILE
FURNISHED IN PAIRS OF
RIGHT AND LEFT HAND

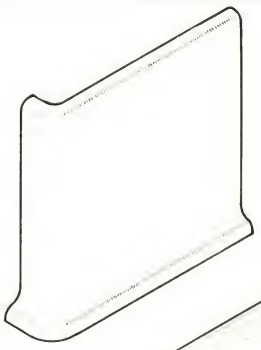
328C
3"X3"
CORNER TILE
OR TOP MOULD

332CC
3"X3"
DOUBLE
BULL NOSE

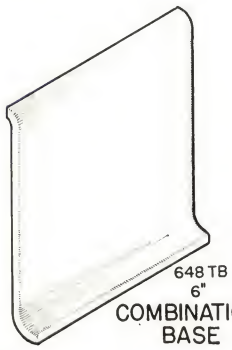
212
1½"X1½"
TILE

348B
3"X6"
BASE
COVE

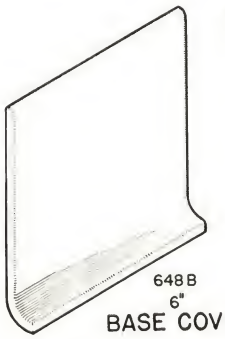
656TBXL
6"
LEFT HAND
COMBINATION
BASE
EXTERNAL
CORNER
ALSO FURNISHED IN RIGHT HAND



652BXL
6"
LEFT HAND
BASE
EXTERNAL
CORNER
ALSO FURNISHED IN
RIGHT HAND



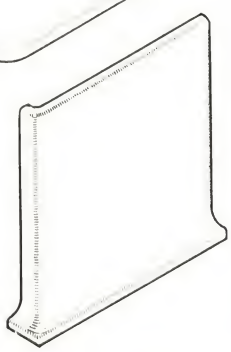
648TB
6"
COMBINATION
BASE



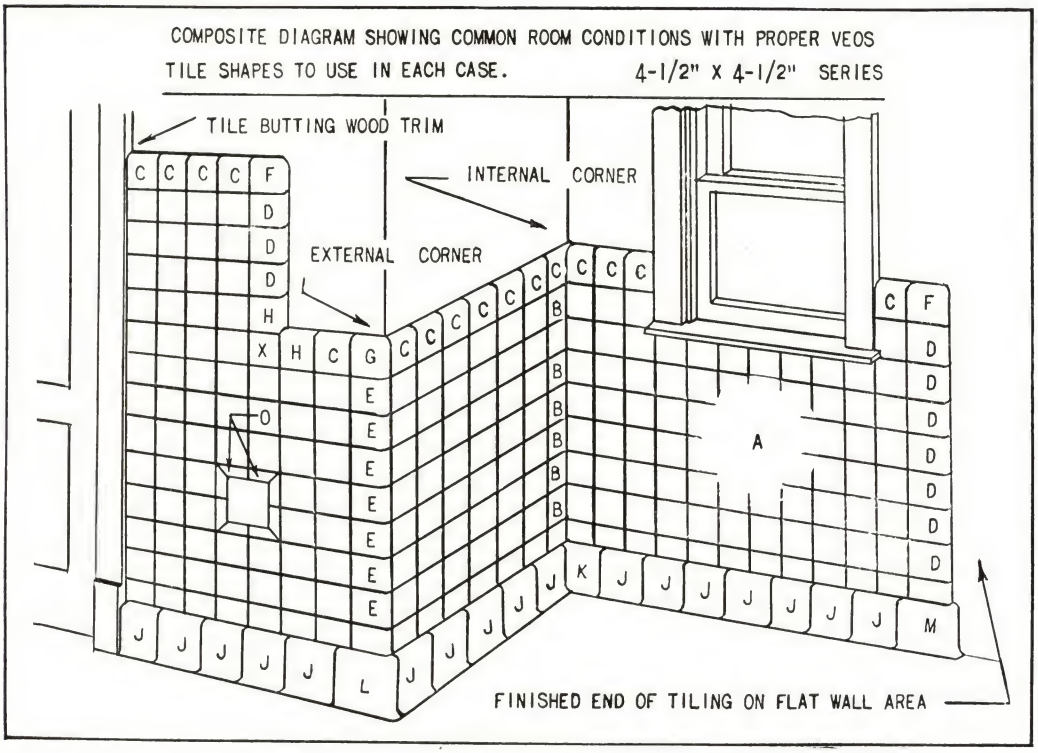
648B
6"
BASE COVE

644TBIR
6"X6"
COMBINATION
BASE
INTERNAL CORNER,
RIGHT HAND
ALSO FURNISHED
IN LEFT HAND

352BXL
6"
BASE
EXTERNAL CORNER,
LEFT HAND
ALSO FURNISHED
IN RIGHT HAND



VEOS STANDARD STOCK ITEMS TO MEET ALL ROOM CONDITIONS



KEY TO DIAGRAM LETTERS

A—Field Tile used in tiling the field or "body" areas of all flat surfaces.

B—Fractional Field Tile used principally to prevent cutting Field Tile when tiling into room corners.

C—Top Cap for Field Tile.

D—End Stop for Field Tile.

E—External corners for Field Tile.

This tile, made with radius on one edge (one edge rounded) is a finishing tile, designed to return the tiled field area back to original wall line where the end of the tiling would otherwise be exposed.

F—Top Cap End Stop.

G—Top Cap External Corner.

H—Top Cap Mitred Corners — left and right mitre. Always used in pairs and in connection with carrying tile to a higher or lower level.

J—Combination Base Tiles, coved top and bottom. Due to one-half inch cove at top edge of this shape, the base extends out one-half inch from the plane of the Field Tile.

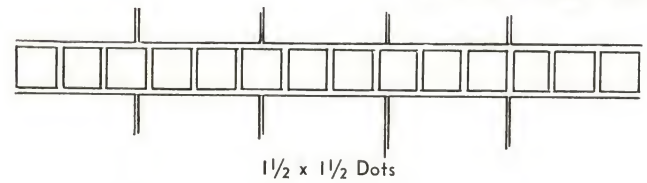
K—Combination Base Internal Corner—left or right. Used in connection with base when making internal corner turn to left or right.

L—Combination Base External Corner — left or right. Used in combination with base to make external corner turn to left or right.

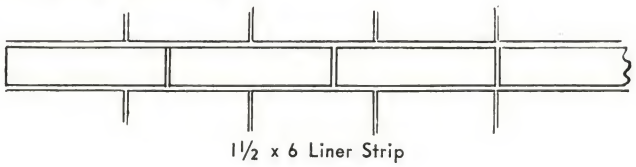
M—Combination Base Stops. Same as Combination Base External Corner but may be used as Combination Base Stops when desired.

O—Mitred Tile, used in pairs. For installing Veos recessed bathroom fixtures (see page 11).

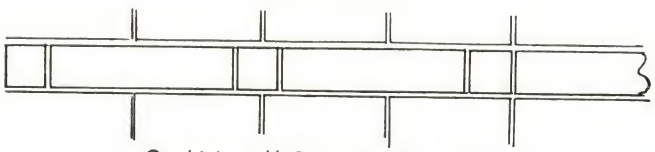
SUGGESTED BORDER TREATMENTS



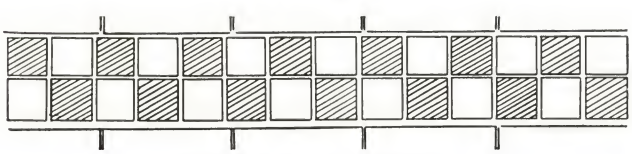
1½ x 1½ Dots



1½ x 6 Liner Strip



Combining 1½ Dots and 1½ x 6 Liner



Two Row Border 1½ Dots

METHODS OF INSTALLATION
ARCHITECT'S SPECIFICATIONS . . . . .

SCOPE OF WORK

(1) All walls and partitions throughout the following rooms and areas shall be covered with VEOS Steel Wall Tile as manufactured by the Youngstown Pressed Steel Company, Warren, Ohio:—

(2) Tiles shall be (3″ x 3″, 3″ x 4½″, 3″ x 6″, 4½″ x 4½″ 6″ x 6″ and 6″ x 12″) of colors selected by the Architect; shall extend from the floor to the heights indicated on the drawings; and the Contractor shall provide all caps, base, corner angles and special shapes required.

PREPARATION OF SURFACES

Note: Use 3 and 4 with 10 for stud framed walls and partitions.

(3) All studs forming partitions and walls which are to be tiled shall be straightened by kerfing and wedging and shall be furred horizontally back of the title with continuous 1″ x 2″ white pine strips set 6″ on centers and rigidly secured in place with two 10d nails at each end and at each bearing. Joints in furring strips shall occur at bearings only and shall be staggered.

(4) Where built in fixtures occur the Contractor shall provide and install a rough frame of same material as the studs and with horizontal members framed between studs and rigidly spiked thereto.

Note: The 5 to 7 with 10 for tile and masonry walls and partitions.

(5) Where VEOS tiling is to be applied on tile, brick or other masonry surfaces the contractor shall provide a rough coat of plaster full height of the tile wainscots.

(6) Temporary continuous grounds shall be provided along the top and bottom and the plaster coat screeded with a straight edge and finished smooth to a true plane so that the foundation sheets will be flat and plumb and present a plane surface when applied and so that all corner angles will be plumb and true throughout their height.

(7) If the Contractor so elects he may omit the rough plaster coat and provide 1″ x 2″ continuous white pine nailing strips spaced 6″ on centers horizontally and rigidly secured by 10d steel hardened nails full driven not over 10″ apart.

Note: The 8 to 10 for modernization work.

(8) Where VEOS tiling is to be applied over existing plastered surfaces the contractor shall examine the existing surfaces to insure that they are in true planes and plumb and that corners are plumb and in true angle throughout their height.

(9) The Contractor shall do all necessary cutting and fitting of existing lath and plaster, removing all loose, weak or otherwise damaged portions, patching and replacing the plaster as necessary to provide surfaces in true planes, plumb out of wind and ready for the reception of the foundation sheets.

(10) All furring strips shall be shimmed or otherwise applied so as to have solid bearings and shall be accurately positioned so that the foundation sheets will be flat and plumb and present a plane surface when applied and so that all corner angles will be plumb and true throughout their height.

APPLICATION OF FOUNDATION SHEETS

(11) All foundation sheets shall be so laid out that, wherever possible, no tiles less than half full size shall occur. For heights indicated, courses shall be maintained full to produce the nearest attainable height equivalent to less than one half a tile course to avoid cutting of tiles which would otherwise be necessary.

(12) Where borders, lines, patterns, panels or other effects are a part of the work the foundation sheets shall be properly spaced to accurately reproduce the designs required.

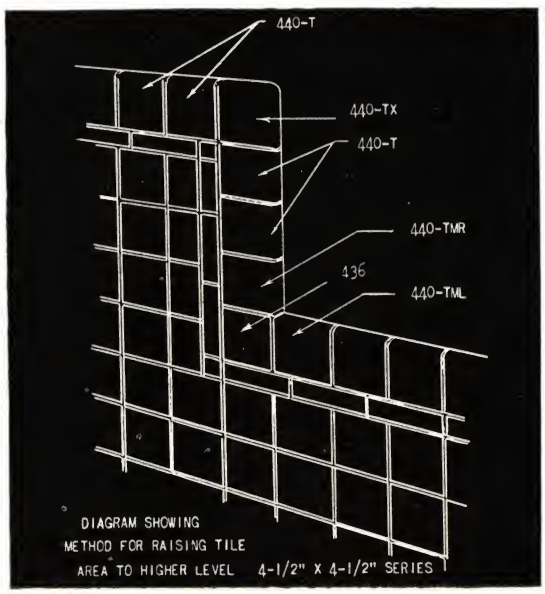


DIAGRAM SHOWING METHOD FOR RAISING TILE AREA TO HIGHER LEVEL 4-1/2" X 4-1/2" SERIES

(13) All foundation sheets shall be applied so that all horizontal tile joints will run level and in unbroken lines throughout the entire area.

(14) The bottom of all sheets shall be placed on a level line ¼″ above the established finish floor line and shall be shimmed as necessary to present a true plane surface entirely out of wind.

(15) The first foundation sheet shall be started ⅛″ away from a door opening or an external corner and shall be run directly into the corner of the room.

(16) The foundation sheet shall be applied to the other wall coming out of the corner by being started ⅛″ away from the first sheet and being run directly into the corner. A similar space of ⅛″ shall be left at all other internal corners and the sheets shall be cut back ⅛″ from all external corners, door, window and other openings as well as from all other fixed vertical surfaces, space of 3/16″ shall be left at all joints between adjacent sheets.

(17) Special reinforcing strips or channels shall be provided at all external corners. One side of these strips shall be securely fastened to the back of the foundation sheets and the other side shall accurately bend over the corner, project onto the intersecting wall surface and be securely nailed thereto with 10d nails spaced 10″ apart vertically.

(18) All foundation sheets shall be shimmed as necessary and so installed as to be plumb and in true planes with all corners exactly plumb and all exposed surfaces entirely out of wind.

(19) All foundation sheets shall be accurately cut for built in fixtures, pipes, conduit and similar items, allowing a space of ⅛″ as specified. Sheets shall be accurately scribed to all irregular surfaces.

Note: Omit 21, 22, 23 and use 19 with 24 for modernization work where foundation sheets are to be applied over existing lath and plaster over wood framing.

(20) All foundation sheets shall be cemented in place by spot glueing same in from six to eight places on the back with VEOS glue and shall then be securely nailed in place with galvanized or cement coated large head roofing nails spaced 12" O.C. vertically driven through into existing studs.

Note: Omit 22 and use 21 with 23 and 24 for foundation sheets applied and plaster over masonry construction.

(21) All foundation sheets shall be cemented to the plaster by spot glueing same in six or eight places on the back with VEOS glue and shall then be securely nailed in place with large head hardened steel nails.

(22) All foundation sheets shall be securely fastened to the backing with galvanized or cement coated large headed roofing nails.

(23) Nails shall be driven 12" on centers vertically on rows 12" on centers horizontally, each row being staggered 6" with respect to the preceding one.

(24) Nails shall be full driven but not so as to crush in the surface of the sheets. No nails shall occur within 12" of the edge of external corners on the wall surface where metal strips are attached to the back of foundation sheets.

APPLICATION OF VEOS TILE

(25) Each VEOS tile shall be uniformly coated on the back by a spatula or flat stick with a layer of VEOS glue and shall be applied to the foundation sheet by pressing firmly into place with a slight side movement so that the entire space between the tile and the board is filled with glue.

(26) The space between the bottom edges of the foundation sheets and the finish floor, the space between the top cap and the top edge of sheets, the space at all external corners, as well as all open spaces between the tile itself and the foundation sheet due to the curvature of the tile, shall be filled with grouting cement mixed thoroughly and fairly thick.

(27) Before installing the tiles, the Contractor shall measure up the spaces, ascertain what cutting of tiles is necessary and shall arrange as far as possible so that all cut tiles shall occur in inconspicuous places.

(28) The base tile shall be set first then the top cap and the field tile shall then be laid from the cap down.

Note: Use 29 only for 3" x 6" tiles.

(29) Tile shall be laid with all vertical joints in any one course breaking with respect to those in the course next below.

Note: Use 30 only for 3" x 3" and 4½" x 4½" tiles.

(30) Tile shall be laid with unbroken vertical and horizontal joints.

(31) All fixtures shall be set and rigidly secured in place before laying tiles.

Note: Use 32 where masonry walls occur.

(32) The Contractor shall cut recesses in walls for reception of the built in fixtures and shall attach the fixtures rigidly in place with expansion or toggle bolts before laying the tiles.

(33) The Contractor shall cut all tiles accurately to size with an approved electric driven abrasive disc machine and in such a manner as not to mar or chip the surfaces and shall cover all cut edges with VEOS edging material before applying the tiles.

(34) Holes for passage of pipes, conduit, etc., shall be accurately cut to size so that the regulation plate, collar or covering will overlap the tiles on all sides.

(35) The Contractor shall provide VEOS cement, shall mix and prepare same as directed by the manufacturer and shall grout all tiles carefully in place using rubber gloves and rubbing the grout into all joints so as to thoroughly fill same and so as to force the grout into the groove behind the flanges of the tile.

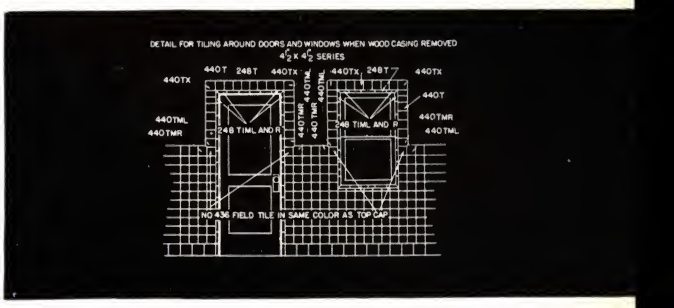
(36) Excess cement shall then be removed with a rubber squeegee or wiper and the face of the tiles carefully sponged clean with water.

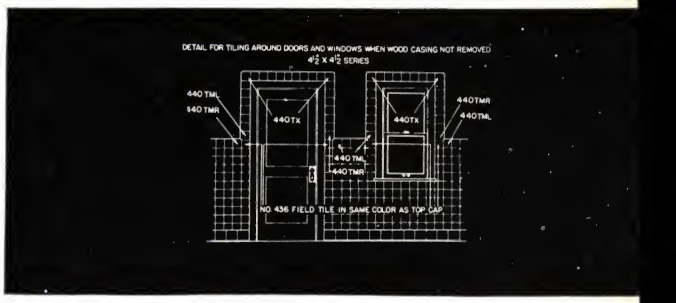
(37) Joints shall then be tooled with a special round nosed tool with rounded point slightly larger than the joint width.

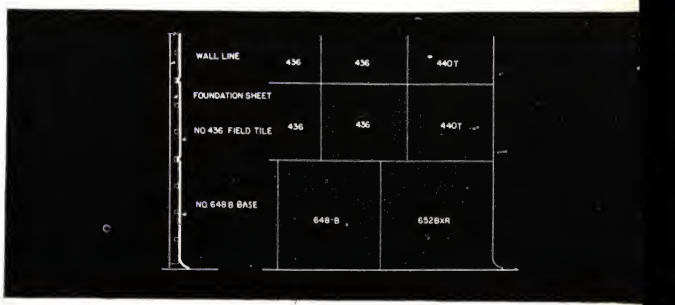
(38) Excess grout shall then be carefully removed with water and sponge so as not to disturb the joint.

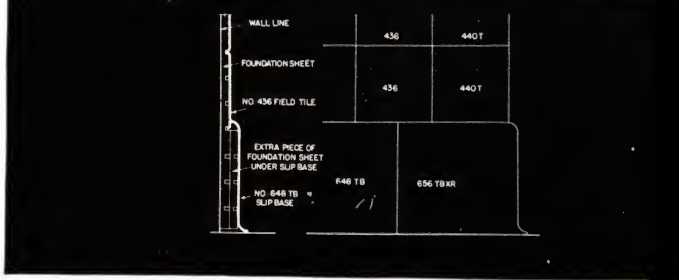
(39) At completion the surfaces of all tiles shall be left clean.

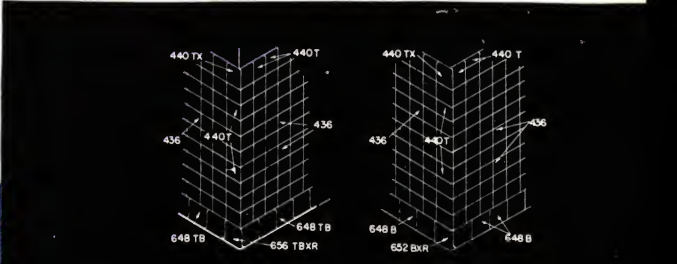
(40) In freezing weather tiles shall not be set on foundation sheets nor grouted nor shall scratch plaster coats for foundation sheets be applied in unheated portions of the building.











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